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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NANO, SARGON N

ART UNIT PAPER NUMBER

2157

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,091

Applicant(s)

SHIMADA ET AL.

Examiner

Sargon N. Nano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 11-15, 18-21 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is responsive to application filed on January 28, 2002.

Claims 1 – 41 are pending examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1- 10, 16, 17, 22- 24, 26 – 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Amin et al. U.S. Patent No. 6,910,074.

As to claim 1, Amin teaches a packet relay processing apparatus having a network connecting device, wherein the network connecting device comprises : a session managing unit managing a session, and a packet processing unit relaying a packet based on session management made by said session managing unit (see col. 7 lines 23 – 64, Amin discloses a session management request function from end user to a network service provide, where establishing and managing data oriented services is taking place).

As to claim 2, Amin teaches the packet relay processing apparatus according to claim 1, wherein the network connecting device further comprises a routing table storing

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routing information about a routing destination of a packet, and a routing processing unit determining the routing destination of the packet based on the routing information at the start of a session; and said packet processing unit outputs the packet to the routing destination (see col. 7 lines 5 – 16).

As to claim 3, Amin teaches the packet relay processing apparatus according to claim 2, further having a server, wherein the server comprises a network controlling unit writing routing information to said routing table (see col. 10 lines 26 – 53).

As to claim 4, Amin teaches the packet relay processing apparatus according to claim 1, further having a server, wherein:

the server comprises an external session managing unit managing a session; said session managing unit transfers session information about a session depending on a given condition; and said external session managing unit manages the session based on received session information (see col. 9 line 64 – col. 10 line 34).

As to claim 5, Amin teaches the packet relay processing apparatus according to claim 1, wherein the network connecting device further comprises a process distributing unit, and a plurality of service processing units(see col. 11 lines 2 – 18);

said process distributing unit distributes a packet to at least one of said plurality of service processing units based on contents of a service for the packet; and

a service processing unit to which the packet is distributed performs a service process for the packet(see col. 11 lines 2 – 18).

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As to claim 6, Amin teaches the packet relay processing apparatus according to claim 5, further having a server, wherein: the server comprises an external service processing unit;

said process distributing unit transfers a packet to the server depending on a given condition; and said external service processing unit performs a service process for a received packet (see col. 9 line 64 – col. 10 line 34).

As to claim 7, Amin teaches the packet relay processing apparatus according to claim 1, further having a server, wherein: the server comprises a packet details analyzing unit; the network connecting device further comprises a process distributing unit, and a plurality of service processing units(see col. 9 line 64 – col. 10 line 34);

said process distributing unit transfers a packet to said packet details analyzing unit depending on a given condition; and said packet details analyzing unit determines contents of a service for the packet by analyzing the packet and sets the determined contents of the service in the network connecting device; and the network connecting device processes the packet based on the contents of the determined service, after the contents of the service are set (see col. 9 line 64 – col. 10 line 34).

As to claim 8, Amin teaches the packet relay processing apparatus according to claim 5, wherein said service processing unit has a capability for rewriting a header of a packet (see col. 19 line 34 – col. 20 line 34).

As to claim 9, Amin teaches the packet relay processing apparatus according to claim 5, wherein said service processing unit has a capability for discarding a packet(see col. 19 line 34 – col. 20 line 34).

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As to claim 10, Amin teaches The packet relay processing apparatus according to claim 5, further having a server, wherein said service processing unit has a capability for determining a distribution destination of a load in order to distribute a load on the server(see col. 25 lines 3 – 40).

As to claim 16, Amin teaches the packet relay processing apparatus according to claim 1, wherein said session managing unit waits for a predetermined time period from a termination of a session, and deletes session information about the terminated session unless the terminated session is resumed while waiting for the predetermined time period (see col. 20 lines 50 – 62).

As to claim 17, Amin teaches the packet relay processing apparatus according to claim 1, wherein the network connecting device further comprises a counter for obtaining statistical information about a packet(see col. 20 lines 50 – 62).

As to claim 22, Amin teaches the packet relay processing apparatus according to claim 7, wherein if a packet transferred to the server is an HTTP protocol GET packet, said packet details analyzing unit determines a service for the packet based on a URL (Uniform Resource Locator) included in the packet (see col.22 lines 16 – 30).

As to claim 23, Amin teaches the packet relay processing apparatus according to claim 7, wherein if a packet transferred to the server is an ACK packet for an FTP protocol PORT or PASV command, said packet details analyzing unit determines a service for the packet based on IP address and port number of a data connection corresponding to a session (see col. 22 lines 45 – 67).

As to claim 24, Amin teaches the packet relay processing apparatus according to claim 7, wherein said packet details analyzing unit makes a reply instead of a distribution destination server until the distribution destination of a load on the server is determined, if a process for distributing a load on the server is performed (see col. 25 lines 3 – 40).

As to claim 26, Amin teaches a network connecting device for use in a packet relay processing apparatus, comprising:

a session managing unit managing a session; and a packet processing unit relaying a packet based on session management made by said session managing unit (see col. 7 lines 23 – 64).

As to claim 27, Amin teaches the network connecting device according to claim 26, further comprising a server transferring unit transferring session information about a session to a server comprised in the packet relay processing apparatus depending on a given condition, wherein the server manages the session according to the transferred session information (see col. 12 line 54 – col. 13 line 24).

As to claim 28, Amin teaches the network connecting device according to claim 26, wherein the network connecting device further comprises a process distributing unit, and a plurality of service processing units; said process distributing unit distributes a packet to at least one of the plurality of service processing units based on contents of a service for the packet; and a service processing unit to which the packet is distributed performs a service process for the packet (see col. 21 line 56 – col. 22 line 15).

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As to claim 29, Amin teaches the network connecting device according to claim 28, wherein said process distributing unit transfers a packet to the server comprised in the packet relay processing apparatus depending on a given condition, and makes the server perform the service process for the packet (see col. 12 line 54 – col. 13 line 24).

As to claim 30, Amin teaches the network connecting device according to claim 26, further comprising a process distributing unit, and a service processing unit, wherein said process distributing unit transfers a packet to the server comprised in the packet relay processing apparatus depending on a given condition in order to make the server determine a service for the packet(see col. 12 line 54 – col. 13 line 24);

and the service processing unit processes a packet of the session based on contents of the service determined by the server, after the service is determined by the server(see col. 12 line 54 – col. 13 line 24).

As to claim 31, Amin teaches a storage medium on which is recorded a program for causing a computer comprised as a network connecting device to execute a process, the process comprising:

managing a session (see col. 7 lines 23 – 64); and

relaying a packet based on session management(see col. 7 lines 23 – 64).

As to claim 32, Amin teaches the storage medium according to claim 31, the process further comprising:

transferring session information about the session to a server connected to the network connecting device depending on a predetermined condition in order to make the server manage the session (see col. 12 line 54 – col. 13 line 24).

As to claim 33, Amin teaches the storage medium according to claim 31, the process further comprising:

distributing a packet to a device or a program segment, which performs a process corresponding to a service, based on contents of a service for the packet (see col. 9 line 64 – col. 10 line 34).

As to claim 34, Amin teaches the storage medium according to claim 31, the process further comprising:

transferring a packet to a server connected to the network connecting device depending on a given condition in order to make the server perform a service process for the packet (see col. 9 line 64 – col. 10 line 34).

As to claim 35, Amin teaches the storage medium according to claim 31, the process further comprising:

transferring a packet to a server connected to the network connecting device in order to make the server determine a service for the packet; and processing the packet based on contents of a determined service after the service for the packet is determined by the server(see col. 9 line 64 – col. 10 line 34).

As to claim 36, Amin teaches a storage medium on which is recorded a program for causing a server, which configures a packet relay processing apparatus relaying a packet, to execute a process, the process comprising setting a policy describing a rule

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for executing a service for a packet in a network connecting device so that the network connecting device comprised in the packet relay processing apparatus processes the packet (see col. 12 line 54 – col. 13 line 24).

As to claim 37, Amin teaches the storage medium according to claim 36, the process further comprising receiving a packet transferred from the network connecting device, and executing the service for the received packet(see col. 12 line 54 – col. 13 line 24).

As to claim 38, Amin teaches a storage medium on which is recorded a program for causing a server, which configures a packet relay processing apparatus relaying a packet, to execute a process, the process comprising:

receiving a packet transferred from a network connecting device comprised in the packet relay processing apparatus(see col. 12 line 54 – col. 13 line 24);

determining contents of a service for the packet by analyzing the packet; and setting the contents of the determined service in the network connecting device in order to make the network connecting device process the packet based on the contents of the determined service (see col. 12 line 54 – col. 13 line 24).

As to claim 39, Amin teaches a computer data signal embodied in a carrier wave and representing a program for causing a computer comprised as a network connecting device to execute a process, the process comprising:

managing a session; and relaying a packet based on session management(see col.7 lines 23 – 64).

As to claim 40, Amin teaches a computer data signal embodied in a carrier wave and representing a program for causing a server, which configures a packet relay processing apparatus relaying a packet, to execute a process, the process comprising setting a policy describing a rule for executing a service for a packet in a network connecting device which configures the packet relay processing apparatus so that the network connecting device processes the packet(see col.12 line 54 – col. 13 line 24).

As to claim 41, Amin teaches a computer data signal embodied in a carrier wave and representing a program for causing a server, which configures a packet relay processing apparatus relaying a packet, to execute a process, the process comprising: receiving a packet transferred from a network connecting device which configures the packet relay processing apparatus(see col. 9 line 64 – col. 10 line 34); determining contents of a service for the packet by analyzing the packet; and setting the contents of the determined service in the network connecting device in order to make the network connecting device process the packet based on the contents of the determined service(see col.12 line 54 – col. 13 line 24).

Allowable Subject Matter

Claims 11, 12, 13, 14, 15, 18, 19, 20, 21, 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon N. Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano
Sep. 27, 2005


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